

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04J3/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04J 606F H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 052 793 A (CANON KK) 15 November 2000 (2000-11-15) cited in the application paragraph '0001! paragraph '0054! - paragraph '0056! paragraph '0082! - paragraph '0089! paragraph '0159! - paragraph '0166! figure 2 figure 5a	1-10
Y	US 4 694 472 A (TOROK GABOR P ET AL) 15 September 1987 (1987-09-15) column 2, line 20 - line 32 column 2, line 44 - line 63 claim 2 ----- -/--	1-10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

23 September 2004

Date of mailing of the international search report

04/10/2004

Name and mailing address of the ISA

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Marongiu, M.T.

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EP 1 280 024 A (BAYERISCHE MOTOREN WERKE AG ; BOSCH GMBH ROBERT (DE); DAIMLER CHRYSLER) 29 January 2003 (2003-01-29) paragraph '0001! paragraph '0005! paragraph '0010! paragraph '0019! paragraph '0023! paragraph '0024! paragraph '0043! paragraph '0050!</p> <p>-----</p>	1-10

Information on patent family members

International Application No

PCT/EP2004/051504

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1052793	A	15-11-2000	FR 2793624 A1	17-11-2000
			FR 2793625 A1	17-11-2000
			EP 1052793 A1	15-11-2000
			JP 2001024630 A	26-01-2001
US 4694472	A	15-09-1987	NONE	
EP 1280024	A	29-01-2003	EP 1280024 A1	29-01-2003
			DE 20121466 U1	27-02-2003
			WO 03010611 A1	06-02-2003

VIII-3-1	<p>Declaration: Entitlement to claim priority Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(III) and 51bis.1(a)(III))</p> <p>Name:</p>	<p>in relation to this international application</p> <p>RAUSCH, Mathias P is entitled to claim priority of earlier application No. 0316876.2 by virtue of the following:</p>
VIII-3-1(i)		<p>the applicant is the inventor of the subject matter for which protection was sought by way of the earlier application</p>
VIII-3-1(i)x)	<p>This declaration is made for the purposes of:</p>	<p>US</p>

VIII-3-2	<p>Declaration: Entitlement to claim priority Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))</p> <p>Name:</p>	<p>in relation to this international application</p> <p>TEMPLE, Christopher P is entitled to claim priority of earlier application No. 0316876.2 by virtue of the following:</p>
VIII-3-2(i))		<p>the applicant is the inventor of the subject matter for which protection was sought by way of the earlier application</p>
VIII-3-2(i) x)	<p>This declaration is made for the purposes of:</p>	<p>US</p>

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 18 OCT 2005

WIPO

PCT

Applicant's or agent's file reference SC12838EM PCT		FOR FURTHER ACTION		See Form PCT/PEAA416
International application No. PCT/EP2004/051504		International filing date (day/month/year) 15.07.2004		Priority date (day/month/year) 18.07.2003
International Patent Classification (IPC) or national classification and IPC H04J3/06				
Applicant FREESCALE SEMICONDUCTORS, INC. et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 19.03.2005		Date of completion of this report 18.10.2005		
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Marongiu, M.T. Telephone No. +31 70 340-		



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/051504

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-10 as originally filed

Claims, Numbers

1-10 as originally filed

Drawings, Sheets

1/1 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/051504

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: EP-A-1 052 793 (CANON KK) 15 November 2000 (2000-11-15)
D2: US-A-4 694 472 (TOROK GABOR P ET AL) 15 September 1987 (1987-09-15)

1. Lack of inventive step

- 1.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claims 1, 7 and 10 does not involve an inventive step in the sense of Article 33(3) PCT.
- 1.2 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A computer node comprising a synchronization unit for comparing network timing information for a first network with network timing information for a second network (paragraphs: [0086]-[0089], [0159]; Fig. 2; Fig. 5a) and for communicating to the second network the difference between the first network timing information and the second network timing information (paragraphs: [0161]-[0164]) to allow the second network to alter its network timing information using the difference to allow the network timing information between the first network and the second network to be reduced (paragraphs: [0165], [0166]).

- 1.3 The subject-matter of claim 1 therefore differs from this known computer node in that:
the computer node communicates only the sign of the timing difference and not the timing difference itself;
the sign of the timing difference is sent to the first network and not to the second network.

Concerning the difference in sending the synchronization information to the first

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

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network and not to the second one, this distinguish feature seems not solving any specific technical problem and not adds anything of inventive significance for the person skilled in the art.

- 1.4 The problem to be solved by the present invention may therefore be regarded as how to save bandwidth in the transmission of synchronizing information.
- 1.5 Document D2 discloses a clock adjustment method and apparatus which utilizes a transmitted positive or negative predetermined fixed increment clock adjustment signal to phase adjust the clock of a system (col. 2, lines 20-32; 44-63; claim 2). In this way the number of bits required to send clock information over the communication channel is reduced and the efficiency of the data transmission is increased.
- 1.6 Without the exercise of inventive skill, the person skilled in the art would apply this feature to the synchronization device of document D1 in order to solve the problem posed.
The subject-matter of claim 1 of the present application cannot therefore be considered as involving an inventive step (Article 33(3) PCT).
- 1.7 The same reasoning set out above applies, mutatis mutandis, to the subject-matter of the corresponding independent system claim 7 and method claim 10 which therefore are also considered not inventive.

2. Dependent claims

Dependent claims 2-6, 8, 9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step.

The subject-matter of claims 2-6, 8, 9 is already disclosed in document D1 (paragraphs: [0161]-[0163]; Fig. 2; Fig. 5a) or represents an obvious design feature for the person skilled in the art.